



the centre of the screen with the four sides labelled N, E, S, W. North and South's hands are then fully displayed. Usually the four suits are shown: spades, hearts, diamonds and clubs, ranked in that order, with the card values displayed alongside.

The player is assumed to be South, and either North or South will be the dummy. In either event, South always plays the cards for both. In other words, South always plays the hand, irrespective of whether North or South won the bidding. This is, of course, a departure from actual bridge play, in which you can spend an entire evening without once winning the contract.

In a tutorial program this departure does not matter, except in the important area of defensive play. These skills are needed when you want to stop your opponents from fulfilling the contract once they have won the bidding. In a playing program, the implications are more serious, and we do not know of a playing program that will play out a sequence in which East and West win the bidding. If you 'duck out' of the bidding in, for example CP Software's excellent playing program for the 48 Kbyte Spectrum — in other words if you deliberately allow East or West to be declarer — then the program prints a message on the screen telling you that it is not designed to play under such circumstances, and instructs you to press the R key to generate a new hand.

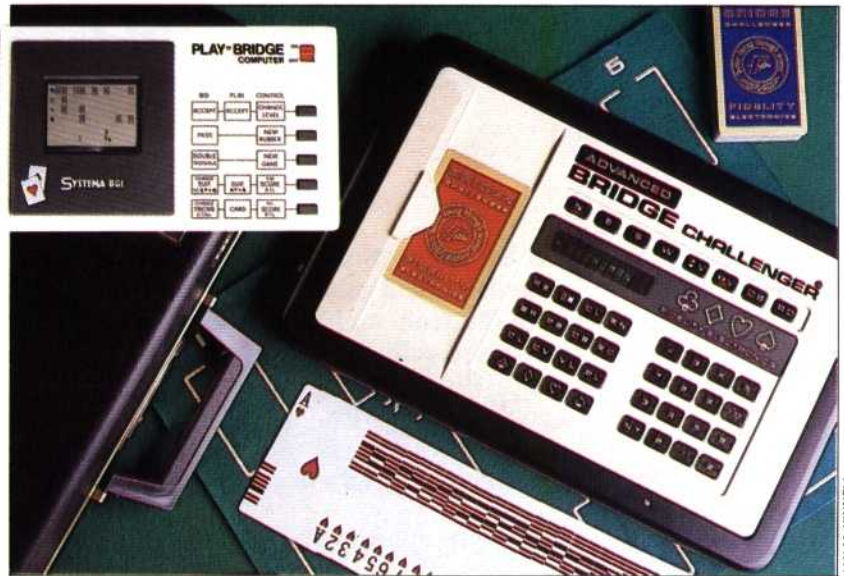
When the bidding has been completed, the play of the hand is displayed. Depending on who wins the trick, either the computer (playing for E and W) or the player (for S or N) selects a card. E and W's cards appear on the screen one by one, as they would on the table during normal play.

There are a number of useful features that computer-based programs offer. Bridgmaster, for example, lets the player choose from four options before each deal depending on the level of competence. P plays the hands out with the human player selecting plays for N and S (under Reese's guidance); A selects 'autoplay', where you watch the hand played out automatically; H displays all four hands on the screen, while D selects a different deal. This is a standard set of options with most bridge programs.

The autoplay feature is particularly useful in combination with Reese's commentary, since the player does not have to be distracted by the task of selecting cards. All deals can be replayed over and over again. Playing programs have these features as well, but here they act not as repeated drills of teaching points, but as post mortems on the bidding and the play.

We have looked at some of the principles of tutorial packages, but there are also a number of programs on the market for the more advanced player who wishes to improve his game.

The Expert Bridge package in the Bridgmaster series that we have discussed previously is a well presented advanced instruction course that looks at the complexities of such things as high point hands, slam bidding, squeeze and blocking plays.



Another package worth looking at for the more experienced player is the playing program from Alligata Software. Versions are available for the Oric, BBC Model B and Electron and the Commodore 64. A fair amount of bridge knowledge is assumed by the program and there is no manual provided with this package, so players without good memories had better be prepared to take notes.

CP Software's program for the Spectrum is a very enjoyable program to play. It will not play the hand as declarer, so there is no way to practise your defensive play. However, since most amateurs and social players, who make up 98 per cent of the world's bridge playing fraternity, want to play every hand anyway, this is not a great disadvantage.

Bridge programs, both of the tutorial and playing kind, are an ideal way of learning the game and improving on your weak points. Bridge is a game that demands so many different skills: a good memory, analytical skills, the ability to work in a partnership, the ability to play with caution and to know when to take a risk, and the ability to remain inscrutable and to keep a cool head. The games that we have discussed will not perfectly simulate a bridge game between four players, but they will certainly give you worthwhile and stimulating practice.



Dedicated Challenge

The two machines pictured are bridge-playing computers. The first (right) is a table-top game called Advanced Bridge Challenger, by Fidelity Electronics. Bridge Challenger is recommended only for experienced bridge players as it requires a great deal of practice and concentration to master. A major drawback of the Bridge Challenger is its tiny 8-character screen. It sells for £169.95. The second machine (left) is the Systema Play-Bridge computer. This operates on batteries and costs £29.95. Play-Bridge takes only a few minutes to understand; it doesn't have many advanced features, but it is great fun to play

Pick A Package

There are a number of bridge packages available, ranging from teaching programs to challenging games that test the skills of advanced players. Shown here (left to right) are Bridgmaster, available on cassette for the Spectrum, ZX81, BBC Model B, Electron, and Commodore 64 at £24.95 each; Bridge from Alligata Software, available on cassette for the Oric, BBC Model B, Electron and Commodore 64 at £8.95; and Bridge Player from CP Software, available on cassette for the 48 Kbyte Spectrum at £9.95